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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,056	06/20/2001	Robert Jacob von Gutfeld	YOR920000825	2691

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EXAMINER	
HARAN, JOHN T	

ART UNIT	PAPER NUMBER
1733	8

DATE MAILED: 05/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/884,056	VON GUTFELD ET AL.	
	Examiner	Art Unit	
	John T. Haran	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 April 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) *10,11 and 17* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9,12-16 and 18-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *1,4,5* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Species A, claims 1-9, 12-15, and 18-29 in Paper No. 7 is acknowledged.

Specification

2. The disclosure is objected to because of the following informalities:

The blanks on pages 1 and 2 of the specification should be filled in and the patent numbers should be inserted for all applications that have become patents since filing the application.

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the specification should be amended to stipulate that the diffuser can comprise a grating tape as claimed in claims 9 and 26.

Appropriate correction is required.

Drawings

4. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-9, 12, 15, and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The use of the term coupler in claims 1, 12, and 15 is confusing and renders the claims indefinite. It does not appear that the term "coupler" is actually used in the specification and it is unclear what the term is meant to include. Does it include liquid coupling agents as well as adhesives? Also in claims 2, 3, 5, and 8 it is unclear if the adhesive is part of the diffuser, is the coupler, or both. Clarification is requested. It is noted that if the adhesive is considered to be the coupler and part of the diffuser then claims 1, 12, and 15 should indicate that the coupler is part of the diffuser and not a separate component of the system.

Claim 1 is also indefinite because it is unclear which substrate is being referred to in the last line. It appears it is the first substrate and the claim should be amended to indicate such to avoid confusion.

Claim 5 recites the limitation "the adhesive" in line 1. There is insufficient antecedent basis for this limitation in the claim. It appears the claim should depend from a different claim.

Claim 15 recites the limitation "said alternating opaque and transparent regions" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 28 is also indefinite because it is unclear which substrate is being referred to in the last line. It appears it is the first substrate and the claim should be amended to indicate such to avoid confusion.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claim 16 is rejected under 35 U.S.C. 102(a) and 102(e) as being anticipated by Von Gutfeld et al (U.S. Patent 6,179,679).

The applied reference has a common inventors with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Von Gutfeld et al '679 disclose a method of sealing first and second substrates comprising curing a glue sealing strip provided on a surface of at least one of the substrates with ultraviolet (electromagnetic) radiation wherein the surface includes transparent and opaque areas and the ultraviolet light is redirects to cure the glue in the areas under the opaque areas (Column 3, lines 20-45). Von Gutfeld et al '679 anticipate claim 16.

9. Claims 12-16 are rejected under 35 U.S.C. 102(e) as being anticipated by anticipated by Von Gutfeld et al (U.S. Patent 6,284,087)

The applied reference has a common inventors with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Von Gutfeld et al '087 disclose a system, a display, and a method of sealing first and second substrates comprising a first substrate with alternating transparent and opaque regions with respect to incident electromagnetic radiation (ultraviolet), a second substrate, a polymer used for affixing the first substrate to the second substrate, a radiation diffuser transparent to incident ultraviolet radiation, a coupler for attaching the radiation diffuser to the first substrate and a source of ultraviolet radiation, wherein the polymer is fully cured by the radiation diffuser redirecting the ultraviolet radiation to cure the glue under the opaque regions of the first substrate (See Figure 6; Column 2, lines 31-36; and Column 4, line 62 to Column 5, line 10). Von Gutfeld et al '087 anticipate claims 12-16.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

> invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 1-9, 12-16 and 18-29 are rejected under 35 U.S.C. 103(a) as being obvious over the admitted prior art in view of Von Gutfeld et al (U.S. Patent 6,284,087).

The applied reference has a common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

The admitted prior art teaches a system and a method of sealing a first substrate to a second substrate wherein a first substrate have both transparent and alternating opaque and transparent regions with respect to incident electromagnetic radiation is

affixed to a second substrate with a polymer by curing the polymer with electromagnetic radiation such as ultraviolet light (See Figure 1; page 14, line 17 to page 15, line 14). The system and method of the admitted prior art result in a shadowing effect because the polymer under the opaque regions is not cured because the opaque regions block the ultraviolet radiation from reaching the polymer underneath.

Von Gutfeld et al teaches a similar system and method of sealing a first substrate with transparent and opaque regions to a second substrate with a polymer that avoids the shadowing effect by coupling a glass sheet with an upper face prepared a diffuse reflector (radiation diffuser) with a couplant such as water or grease to attach the glass plate to the first substrate. When ultraviolet radiation is directed at the radiation diffuser it diffuses (redirects) the ultraviolet light so that is reaches the polymer under the opaque regions thereby curing the entire polymer and eliminating the shadowing effect (See Figure 6; Column 2, lines 31-36; and Column 4, line 62 to Column 5, line 10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the radiation diffuser and couplant in the system and method of the admitted prior art in order to avoid the shadowing effect as suggested in Von Gutfeld et al.

Regarding claims 2-9 and 20-26, Von Gutfeld et al teach using a transparent plate with a matte finish or hologram designed to spread the ultraviolet light in an angular direction as the radiation diffuser. One skilled in the art would have readily appreciated tape with a matte finish and pressure sensitive adhesive, hologram imprinted polymer sheets with pressure sensitive adhesive, and grating tapes are all

known and that they are functional equivalents and alternate expedients to the transparent plate and couplant of Von Gutfeld et al. It would have been obvious to use known alternate expedients and functional equivalents in the method of the admitted prior art, as modified above, for the radiation diffuser. One skilled in the art also would have appreciated removing the radiation diffuser and adhesive after curing the polymer and it would have been obvious to do so.

Double Patenting

12. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

13. Claim 16 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 8 of prior U.S. Patent No. 6,284,087 (Von Gutfeld et al). This is a double patenting rejection.

Claim 8 (which includes all the limitations of claim 1) of Von Gutfeld et al is a method for sealing first and second substrates together wherein a curable sealant (glue sealing strip) is provided between the first and second substrate, the first substrate having transparent and opaque regions, the sealant is cured with ultraviolet radiation (electromagnetic radiation) and the radiation is reflected (redirected) to cure the sealant under the opaque areas.

14. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

15. Claims 12-16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 5, 6, and 8 of U.S. Patent No. 6,284,087 (Von Gutfeld et al). Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 5, 6, and 8 of Von Gutfeld et al are directed to a method of sealing first and second substrates that requires the system claimed in claims 12-15 of the present application. It would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the method of Von Gutfeld that a system would be needed that includes a first substrate having alternating transparent and opaque regions, a radiation diffuser, a coupler for attaching the radiation diffuser to the first substrate, a second substrate, a polymer for affixing the first substrate to the second substrate, and a source of electromagnetic (ultraviolet) radiation.

16. Claims 1-6, 18-23, and 27-29 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 5, 6, and 8 of U.S. Patent No. 6,284,087 (Von Gutfeld et al) in view of the admitted prior art.

Von Gutfeld et al teaches a method of sealing a first substrate with transparent and opaque regions to a second substrate with a polymer that avoids the shadowing effect by coupling a radiation diffuser with a fluid couplant to attach the radiation diffuser to the first substrate. When ultraviolet radiation is directed at the radiation diffuser it diffuses (redirects) the ultraviolet light so that is reaches the polymer under the opaque regions thereby curing the entire polymer and eliminating the shadowing effect. Von Gutfeld et al is silent towards the first substrate having both transparent and alternating opaque and transparent regions, however such is known as evidenced by the admitted prior art (See Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a first substrate with both transparent and alternating opaque and transparent regions in the method of Gutfeld et al. It also would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the method of Von Gutfeld that a system would be needed that includes a first substrate having alternating transparent and opaque regions, a radiation diffuser, a coupler for attaching the radiation diffuser to the first substrate, a second substrate, a polymer for affixing the first substrate to the second substrate, and a source of electromagnetic (ultraviolet) radiation.

Regarding claims 2-6 and 19-23, Von Gutfeld et al teach using a plate with a matte finish as the radiation diffuser. One skilled in the art would have readily appreciated tapes with a matte finish and pressure sensitive adhesive are known and that they are functional equivalents and alternate expedients to the plate and couplant of Von Gutfeld et al. It would have been obvious to use known alternate expedients and functional equivalents in the method and system of Gutfeld et al as modified above, for the radiation diffuser. One skilled in the art also would have appreciated removing the radiation diffuser and adhesive after curing the polymer and it would have been obvious to do so.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John T. Haran** whose telephone number is **(703) 305-0052**. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on (703) 308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

JEFF H. AFTERGUT
PRIMARY EXAMINER
GROUP 1300